

CLAIMS:

1. A green-compact electrode for discharge surface treatment which uses a discharging operation in working fluid so as to form a hard coating film on the surface of an object which must be machined, said green-compact electrode for discharge surface treatment being characterized by comprising:

a mixed material of a material of said green-compact electrode for discharge surface treatment and fluid which is the same as said working fluid.

2. A green-compact electrode for discharge surface treatment according to claim 1, characterized in that a mixture ratio of the fluid which is the same as said working fluid with respect to said green-compact electrode for discharge surface treatment is 5 wt% to 10 wt%.

3. A method of manufacturing a green-compact electrode for discharge surface treatment characterized by comprising the step of: compression-molding a mixed material of a material of a green-compact electrode for discharge surface treatment and fluid which is the same as working fluid to manufacture a green-compact electrode for discharge surface treatment.

4. A method of manufacturing a green-compact electrode for discharge surface treatment according to claim 3, characterized in that a mixture ratio of the fluid which is the same as said working fluid with respect to said green-compact electrode for discharge surface treatment is 5 wt% to 10 wt%.

5. A method of performing discharge surface treatment such that a green-compact electrode for discharge surface treatment is used and a discharging process in working fluid is performed to form a hard coating film on the surface of an object which must be machined, said method of performing discharge surface treatment being characterized by using a mixed material of a material of said green-compact electrode for discharge surface treatment and fluid which is the same as said working fluid as an electrode.

6. An apparatus for performing discharge surface treatment for forming a hard coating film on the surface of an object which must be machined by using a green-compact electrode for discharge surface treatment and by performing a discharging operation in working fluid, said apparatus for performing discharge surface treatment being characterized by comprising:

a material of said green-compact electrode for discharge surface treatment and fluid which is the same as said working

fluid which constitute said green-compact electrode for discharge surface treatment.

7. A method of recycling a green-compact electrode for discharge surface treatment including a discharge surface treatment step for forming a hard coating film on the surface of an object which must be machined by using a green-compact electrode for discharge surface treatment and performing a discharging operation in working fluid, said method of recycling a green-compact electrode for discharge surface treatment being characterized by comprising:

a compression molding step for molding a mixed material of a material of said green-compact electrode for discharge surface treatment and fluid which is the same as said working fluid;

a discharge surface treatment step for performing a discharge surface treatment process by using an electrode obtained by compression molding; and

a pulverizing step for forming portions in which said electrodes are left after said discharge surface treatment step has been completed into powder, wherein

said compression molding step and following steps are repeated after said pulverizing step has been completed.

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